

**REMARKS**

The Examiner's recognition of Applicants' invention by the indication of allowable subject matter in claims 11, 12, 20, 31 and 32 is gratefully acknowledged.

Independent claims 1 and 18 have been amended to recite that each electrode plate includes a setback between an edge of the dielectric barrier plate and the electrode, a feature found in claims 11 and 31, now cancelled. Claim 18 is also amended to avoid ambiguity in calling out the housing.

Claims 12 and 32 are amended to clarify that the setback is less than about 5 millimeters. Claims 13 and 33 are amended to clarify that the setback is less than the height of the tine. Claims 14 and 34 are amended to clarify that the dielectric edge connectors are composed of a dielectric material. Claim 20 is amended to avoid ambiguity in calling out the adhesive.

Claims 2-5, 7, 8, 21-28, and 37 are amended to provide terminology consistent with antecedents and to improve grammatical clarity.

*Claim Rejection under 35 USC § 112*

Claims 11, 12, 14, 20, 31 and 32 were rejected under 35 U.S.C. § 112 as indefinite.

Claims 1 and 18 are amended to include the features of claims 11 and 31, now cancelled. Moreover, the amendments to these claims clarify that each dielectric barrier

plate has an edge received in a pocket of the dielectric edge connector, and that the electrode on the barrier plate is spaced apart from the edge by a setback. Claims 12 and 32 recite that the setback is less than about 5 millimeters.

The objection points to relative terms in the claims that lack antecedent basis. The claims have been amended to clarify the terms.

In view of the amendments, it is respectfully requested that the rejection under Section 112 be withdrawn and that the claims be allowed.

*Claim Rejection under 35 USC § 102 and § 103*

Claims 1-6, 9, 10, 13-16 were rejected under 35 U.S.C. § 102(b) as anticipated by United States Patent No. 6,309,610, issued to Nejezchleb et al. in 2001. Claims 1-10 and 13-17 were rejected under 35 U.S.C. § 103 as unpatentable over Nejezchleb et al. in view of United States Patent No. 6,139,610, issued to Rogers et al. in 2000. Claims 18, 19, 21-26, 29, 30 and 33-39 were rejected under 35 U.S.C. § 103 as unpatentable over Nejezchleb et al. in view of PCT Application WO 00/49278, published by Andrews et al. in 2000.

In view of the amendments to the independent claims to include acknowledged allowable features, it is believed that the references do not teach or suggest Applicants' invention.

Nejezchleb et al. describes a non-thermal plasma reactor that includes electrodes 26 inserted in grooves 82 of a reactor chamber 66. Electrodes 26i are formed by applying a coating onto a plate 30i. In contrast, Applicants' invention comprises an electrode on a dielectric barrier plate and spaced apart from the edge of the plate that is received in the pockets of the frame. Nejezchleb et al. does not show these features. Thus, Nejezchleb et al. cannot teach or suggest Applicants' invention.

Nor do the secondary references show these features of Applicants' invention. Rogers et al shows an apparatus having electrodes 16 and dielectrics 20 that are coextensive, see Fig. 1 and col. 4, lines 21-27. Andrews et al shows a reactor 200 in Fig. 2 formed of wires 105' and 105" and dielectric beads 208, which are like beads 103 in Fig. 1, see page 7, lines 15-33. The wires 105' and 105" extend beyond the dielectric beads. Thus, neither Rogers et al. nor Andrews et al. teach or suggest a reactor element that includes an electrode set back on a dielectric plate. Therefore, even if combined with Nejezchleb et al., the references do not lead the practitioner to form an electrode plate that includes an electrode on a dielectric barrier plate with a setback from the edge, as in Applicants' invention.

Claim 1 is directed to Applicants' edge-connected non-thermal plasma reactor element that includes a frame and a plurality of electrode plates. The electrode plates comprise a dielectric barrier plate having an edge received in a pocket of the frame. Claim 1 has been amended to more particularly point out that each electrode plate comprises an electrode on a dielectric barrier plate having a setback from the edge

received in the pocket. Nejezchleb et al. does not show this feature, even if combined Rogers et al. or Andrews et al. Therefore, the references do not teach or suggest Applicants' invention as set forth in claim 1, or in claims 17 dependent thereon.

Claim 18 is directed to a non-thermal plasma reactor in accordance with Applicants' invention, which includes a plurality of electrode plates. The claim has been amended to more particularly point out that the electrode plates comprise electrodes on dielectric barrier plates setback from the edge received into the pocket in the frame, similar to claim 1. For the reasons herein, neither Nejezchleb et al., Rogers et al. nor Andrews et al nor their combination show these features. Thus, the references do not teach or suggest Applicants' reactor as set forth in claim 18, or in claims 19-30 and 32-39 dependent thereon.

Accordingly, it is respectfully requested that the rejection of the claims based upon 1-10, 12-30 and 32-39 be reconsidered in view of the amendments thereto and withdrawn, and that the claims be allowed.

*Conclusion*

It is believed, in view of the amendments and remarks herein, that all grounds of rejection of the claims have been addressed and overcome, and that all claims presently in the case are in condition for allowance. If it would further prosecution of the application, the Examiner is urged to contact the undersigned at the phone number provided.

The Commissioner is hereby authorized to charge any fees associated with this communication to Deposit Account No. 50-0831.

Respectfully submitted,



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